

CLAIMS

1. A beverage producing apparatus for controllably combining a concentrate and a dilution material to produce a beverage, the beverage producing apparatus comprising:

5 means for delivering concentrate;

means for delivering dilution material;

a controller operatively coupled to and operatively controlling the concentrate delivering means and the dilution material delivering means;

means for detecting conductivity; and

10 the conductivity means being operatively coupled to the controller for providing conductivity information relating at least a mixture of the concentrate and dilution material, the controller operatively controlling the dispensing of concentrate and dilution material to maintain the conductivity of the mixture in a desired conductivity range.

15 2. A method for controlling the dispensing of a beverage, the method comprising the steps of:

providing means for delivering concentrate;

providing means for delivering dilution material;

providing a controller operatively coupled to the concentrate delivering means

20 and the dilution material delivering means; and

providing means for detecting conductivity;

initiating dispensing of a beverage by sending a signal to the controller;

controllably dispensing dilution material from the dilution material delivering means;

25 dispensing concentrate from the concentrate delivering means;

mixing the concentrate and dilution material to produce a beverage;

pooling prior to dispensing in an area proximate to at least a portion of the conductivity detecting means;

detecting the conductivity of the beverage prior to dispensing; and

30 controllably adjusting at least one of the concentrate and dilution material when the conductivity is not at least one of a predetermined level and range.

3. A system for controllably dispensing beverages and maintaining a beverage dispensed thereby within a desired conductivity range, the system comprising:

means for delivering concentrate;

means for delivering dilution material;

a controller operatively coupled to and operatively controlling the concentrate delivering means and the dilution material delivering means;

5 means for detecting conductivity; and

the conductivity means being operatively coupled to the controller for providing conductivity information relating to at least a mixture of the concentrate and dilution material, the controller operatively controlling the dispensing of concentrate and dilution material to maintain the conductivity of the mixture in a
10 desired conductivity range.

4. A beverage producing apparatus for controllably combining a concentrate and a dilution material to produce a beverage, the beverage producing apparatus comprising:

a controllable concentrate dispensing assembly;

15 a controllable dilution material dispensing assembly;

a controller operatively coupled to and operatively controlling the concentrate dispensing assembly and the dilution material dispensing assembly;

a conductivity detector; and

the conductivity detector being operatively coupled to the controller for
20 providing conductivity information relating at least a mixture of the concentrate and dilution material, the controller operatively controlling the dispensing of concentrate and dilution material to maintain the conductivity of the mixture within at least one of a predetermined conductivity level and a predetermined conductivity range.

5. A method for controlling the dispensing of a beverage, the method
25 comprising the steps of:

providing a controllable concentrate dispensing assembly;

providing a controllable dilution material dispensing assembly;

providing a controller operatively connected to the concentrate dispensing assembly and the dilution material dispensing assembly;

30 providing a conductivity detector;

initiating dispensing of a beverage by sending a signal to the controller;

controllably dispensing dilution material from the dilution material delivering means;

dispensing concentrate from the concentrate delivering means;
mixing the concentrate and dilution material to produce a beverage;
pooling prior to dispensing in an area proximate to at least a portion of the
conductivity detecting means;

5 detecting the conductivity of the beverage prior to dispensing; and
 controllably adjusting at least one of the concentrate and dilution material
when the conductivity is not at least one of a predetermined level and range.

6. A system for controllably dispensing beverages and maintaining a beverage
dispensed thereby within a desired conductivity range, the system comprising:

10 means for delivering concentrate;
 means for delivering dilution material;
 a controller operatively coupled to and operatively controlling the concentrate
delivering means and the dilution material delivering means;
 means for detecting conductivity; and

15 the conductivity means being operatively coupled to the controller for
providing conductivity information relating to at least a mixture of the concentrate
and dilution material, the controller operatively controlling the dispensing of
concentrate and dilution material to maintain the conductivity of the mixture in a
desired conductivity range.